Remarks

Examiner has rejected claims 1-21. Examiner has rejected claims 1-20 under 35 U.S.C. Section 102(e) as being anticipated by Ramamurthy et al (U.S. Patent No. 6,304,551).[1] Examiner has further rejected claim 21 under 35 U.S.C. Section 103 as being rendered obvious by Ramamurthy in view of Baker (U.S. Patent No. 6,519,259).

The present application provides improved methods and systems for adaptively adjusting a buffer size to account for delays experienced in packet transmission. By adaptively determining a buffer size and, optionally, a buffer initiation point, the present inventions permit the substantial reduction of jitter while not being too resource intensive. Page 3:10-15. Relative to the present application, the '259 Patent is directed toward a fundamentally different network management problem: namely, how to shape traffic, given an arbitrary input stream, in order to abide by a set of usage parameter control values negotiated with a network provider for the purposes of resource allocation and traffic policing. Col.2:5-24. The '259 Patent is not primarily directed to solving the problem of smoothing out, or eliminating, jitter in traffic streams.

The differences in purpose are reflected in their very different approach to traffic or data stream characterization. In the '259 Patent, traffic is characterized using a three-parameter descriptor, the peak rate of cell stream transfer, the sustainable rate of cell stream transfer, and the sustainable bucket size. None of those parameters use, or rely upon, a calculation of the number of packets experiencing a particular

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1 It should be noted that, while introductory paragraph 4, on page 3 of the Examiner action, states that only claims 1, 3-7, 9-16, and 18-20 were rejected as being anticipated by Ramamurthy, the body of the Examiner's action indicates that all of claims 1-20 have been rejected as being anticipated by Ramamurthy. Applicant is therefore responding to the entirety of the Examiner's action.

10

amount of delay. One of ordinary skill in the art would simply not equate a rate of transfer, or bucket size, to the calculation of a packet delays, or the creation of a packet delay histogram. In fact, none of the cited equations, see Col.6:55, Col.7:6, Col.7:56, and Col.7:64, use or measure packet delays.

Moreover, while the '259 Patent does mention a mean cell delay (Col.11:30-20) and delay jitter (Col.12:1-20), none of these calculations are deployed in a manner similar to analogous calculations in the present invention. The mean cell delay and delay jitter were determined to demonstrate that the calculated UPC parameters did not create unacceptable delays or jitter. For example:

In summary, a smallest sustainable bucket size, $B_s(\mu)$ is computed for each candidate sustainable rate μ, such that a sustainable rate leaky bucket with parameters $(\mu, B_s(\mu))$ satisfies a constraint on the violation probability or the mean shaping delay according to equation (24), when the violation probability is constrained to be no larger than a predetermined violation probability $\in$, and according to equation (30), when the mean shaping delay is constrained to be no more than the predetermined mean shaping delay D. Col.11:51-59.

This is quite different than the present application, which adaptively calculates a buffer size to manage the actual jitter experienced by data packets, given a certain packet delay profile actually experienced by packets in the course of transmission.

Therefore, in contrast to the present application, the '259 Patent does not characterize data streams by using a packet delay histogram which is a function of the delays experienced by data packets in transmission from a transmitter to a receiver and the number of data packets received at the receiver. The pending

11

independent claims have been amended to more clearly reflect this point and, therefore, all pending claims should overcome Examiner's rejection based on the '259 Patent.

Additionally, regarding claim 20, Applicant respectfully objects to the Examiner's reliance on "inherency" to justify a rejection of this claim. An inherency rejection is only proper where a claim element "necessarily flows" from a particular prior art disclosure. The Examiner asserts that "it is inherent that a processor has program memory, data memory (RAM, ROM, hard drive, etc.) in communication with the processor". Office Action, 16. The original claim language states that the media processors have a plurality of *processing layers* wherein each processing layer has at least one processing unit, at least one program memory, and at least one data memory, each of said processing unit, program memory, and data memory being in communication with one another. Applicant believes that it is wholly improper to assert that the prior art cited to date inherently discloses the use of a plurality of <u>processing layers</u> (not processors) within which each one has at least one processing unit, at least one program memory, and at least one data memory.

Applicant has amended the claim language to make the "processing layer" aspect of the claim limitation clearer. Specifically, applicant has amended the claim to recite at least two processing layers, each <u>operating in parallel</u> to one another and each having at least one processing unit, at least one program memory, and at least one data memory. Applicant believes that this novel architecture is not disclosed by the prior art at all, much less "inherently" disclosed by any cited reference.

Finally, claim 9 has been amended to remove "m", as noted by the Examiner.

Request for a Change in Correspondence Address

On October 29, 2004, Applicant submitted a revocation of power of attorney and new power of attorney appointing attorneys associated with Customer No. 29,484, together with an assignment of interest demonstrating Applicant's authority for doing so. Applicant requests that, in the future, all correspondence be transmitted to PatentMetrix at 14252 Culver Dr., Box 914, Irvine, CA 92604 (Fax No. 714-368-9723/Phone No. 949-233-5172). Future correspondence should not be transmitted to Applicant's old attorney of record (Customer No. 23,879): Brian Berliner, Esq., O'Melveny & Myers, LLP, 400 South Hope Street, Los Angeles, CA 90071-2899.

Request for a Two Month Extension

Applicant is submitting this response on January 29, 2007 in response to an office action mailed on August 29, 2006. The three month statutory timeline for a response ended on November 29, 2006. Applicant is submitting the present response on January 29, 2007 and therefore requests a two month extension. Accordingly, applicant is providing the requisite two month extension fee.

Accordingly, Applicant believes the present application is now in the form for allowance and respectfully requests issuance of a Notice of Allowance.

Respectfully submitted,

By _____.
Hazim Ansari
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